## ABSTRACT OF THE DISCLOSURE

In a method for operating an imaging medical examination apparatus and an apparatus operating according to the method, particularly a magnetic resonance apparatus, measured signals of an examination subject are sequentially registered and processed by an image computer into outputtable image data signals of an individual image or a series of images, and the image data of an individual image or a series of images are interpreted with reference to at least one diagnosis-specific parameter that represents a criterion for the image quality to be achieved and that is predetermined, for the individual image or image series. Dependent on the evaluation result, the measured signal acquisition is ended when the prescribed parameter is satisfied or is continued until a renewed interpretation shows that the prescribed parameter has been met.